

TERMINATION ASSEMBLY FOR USE IN OPTICAL FIBER HYDROPHONE ARRAY

Abstract

A termination assembly for use in an optical hydrophone module, comprising a module oil seal and an optical fiber seal. The termination assembly is used at the ends of modules and provides a means for filling individual modules with fill fluid. A module oil seal comprises a cylindrical wall defining a cavity, with one end substantially closed and the other end open. An annular face plate on the open end makes a seal dividing a coupling and a clevis. A check valve is mounted to an orifice that passes through the substantially closed end of the module oil seal. Optical fibers pass through the substantially closed end and the optical fiber seal is provided around the optical fiber that passes therethrough. The fiber seal fits snugly in a module oil seal opening. Both components serve to provide a seal that can withstand high pressures and maintain optical fiber integrity.